

test-breakfast—cases of gastric ulcer, duodenal ulcer, and nervous dyspepsia. In twelve cases with free HCl of 50 or more, the average absolute diminution was twenty. In most instances the absolute diminution of that acidity exceeded that of free HCl. In no cases was the presence of bile-pigments or trypsin noted in the stomach contents after an oil breakfast. In simple forms of hyperacidity the addition of cream and butter in abundance to the diet, with a diminution of the starches, suffice to remove the subjective manifestations. In the more severe almond oil was administered in doses of 1 ounce in the morning, and repeated before subsequent meals if necessary.

Veronal in the Treatment of Delirium Tremens.—MOLLER (*Berl. klin. Woch.*, 1909, xlii, 2340) reports a series of one hundred cases of delirium tremens treated with veronal. There were two deaths, one from double pneumonia, the other in a patient who had had many previous attacks and was extremely weak on admission to the hospital. Aside from these two cases, remarkably good results were obtained. Immediately after admission 1 gram of veronal is given, and if sleep is not produced by this (which is seldom the case), the same dose is repeated after an interval of three hours. As a rule, the patient goes to sleep quickly and remains asleep for six to twelve hours. On waking, he is clear, mentally, and quiet and feels perfectly well. If tremor persists, 0.5 gram of veronal is administered, and in the course of a few hours it disappears. If the patient remains under treatment for a longer time, he is given 0.5 gram of veronal each evening to insure sleep. In rare instances the delirium may not be controlled by the first 2 grams of veronal; an additional gram may then be administered five to six hours later. In one case veronal dermatitis was observed; otherwise no untoward results were noted. The author recommends that the treatment be given an extended trial.

Successful Inoculations of Chicken Leukemia.—HIRSCHFELD and JACOBY (*Ztschr. f. klin. Med.*, 1909, lxi, 107) have repeated the work of Ellermann and Bang on chicken leukemia, and, since these four authors have brought forward the first proof of the transmissibility of leukemia, it is quite possible that their studies may furnish the groundwork for the discovery of the etiology of human leukemia. Their inoculations were made from a leukemic hen furnished by Ellermann and Bang. The results obtained confirm fully those of the last named authors. Of 49 hens inoculated, 18 developed leukemia and 4 pseudo-leukemia. Subcutaneous inoculations of emulsions of liver, spleen, and bone-marrow always gave negative results; the successes followed intravenous injections. The intraperitoneal route was not tried. The disease developed in from one to five months after the inoculation. The blood showed a progressive anemia, with great increase in the total number of leukocytes, mononuclear, non-granular cells predominating. Cell inclusions were at times met with. Leukemic infiltrations of the liver were very extensive, and the bone-marrow presented characteristic changes. The so-called pseudoleukemias were cases in which the typical blood picture was lacking, though the blood-forming organs showed the usual leukemic metaplasia. Unlike Ellermann and Bang,

the authors have been unsuccessful thus far with inoculations of material passed through a Berkefeld filter. Spontaneous cure has been observed in one hen, while Ellermann and Bang had a similar finding in two instances. Cultures from the organs were without result. Attempts to transfer the disease to pigeons, rabbits, and guinea-pigs have failed. The authors believe that each species has its own leukemia, since the human disease has thus far not been successfully transmitted to lower animals.

The authors have begun experiments similar to those detailed above, employing anthropoid apes, inoculated with the blood of myeloid leukemia of man. As yet, no positive results have been obtained, though it is too early to foretell the outcome of the experiments.

Some work has been done with deviation of complement in chicken leukemia, but nothing of value has been determined.

Experimental Paroxysmal Tachycardia.—LEWIS (*Hcart*, 1909, i, 98) gives a very complete account of the abnormalities of cardiac rhythm following ligation of the coronaries, and pays especial attention to the production of paroxysms of tachycardia with abrupt onset and cessation. In addition to the production of paroxysmal tachycardia, ligation of the descending branch of the left coronary artery may be the cause of the ventricular extrasystoles, single, successive or retrograde, while ligation of the complete right coronary artery with the subsequent anemia of both auricle and ventricle may cause auricular, "nodal," or ventricular extrasystoles, which may be isolated, frequent, and regularly placed, or in groups. Paroxysms of tachycardia were obtained in nine out of twelve dogs, in which the right coronary artery was tied, but in most instances they only set in an hour or more after the circulation was interfered with. The average ventricular rate during the paroxysms was 253, but in some attacks it was over 400. The rhythm was generally regular, and frequently each ventricular beat was followed by a contraction of the auricle at a time interval which slightly exceeded the *a-v* interval of the normally beating ventricle. The duration of the paroxysms varied from a few seconds to thirty-five minutes. The paroxysms were usually preceded by extrasystoles arising in the ventricle—after a short number of beats, retrogression to the auricle took place. When, however, the original sinus rhythm was rapid, the auricle may remain at its former rate, so that there is a complete auriculoventricular dissociation. In some instances, shortly after the onset of the paroxysm, fibrillation of the auricle occurs, apparently the result of impulses showered upon it from above and below. The fibrillation may terminate in response to sinus or to ventricle. Reversed heart block, showing most of the characteristics of the usual condition, may be met with during the paroxysms. Stimulation of the vagus during the paroxysms of tachycardia usually resulted in dropped auricular beats, without change in the ventricular rhythm, but in three instances complete, temporary standstill of the heart was obtained, followed by a return to the normal rhythm. In some cases, then, the ventricle of the dog is under control of the vagus. Alternation of the ventricles was frequent during the attacks of tachycardia. The paroxysms usually terminated by an abrupt return to the normal rhythm, but sometimes ventricular